

What is claimed is:

1. A valve timing control device comprising:
  - a rotating member for controlling a valve timing,
  - a rotation transmitting member which is relatively rotatably fixed to the rotating member,
  - a fluid pressure chamber formed between the rotating member and the rotation transmitting member,
  - a vane which is provided in the fluid pressure chamber and dividing the fluid pressure chamber into an advanced angle chamber and a delayed angle chamber, and
  - a fluid supplying and discharging means for supplying or discharging a fluid to or from the advanced angle chamber and the delayed angle chamber, the fluid supplying and discharging means being relatively rotatable with the rotating member and the rotation transmitting member by supplying the fluid to or discharging the fluid from said advanced angle chamber and the delayed angle chamber,
  - a first cylindrical part is provided on said rotating member,
  - a second cylindrical member is provided around the first cylindrical part and the second cylindrical part is overlaid on the other on an inner side in a radial direction,
  - a sealing groove for accommodating a sealing member for sealing between the first cylindrical part and the second cylindrical member, and
  - a friction between the side surface of the sealing member and the sealing groove is set to be greater than a friction between an outer peripheral surface of the sealing member and an inner peripheral surface of the first cylindrical part.
2. A valve timing control device as in claim 1, one of the first cylindrical part or the second cylindrical member is made of aluminum material.
3. A valve timing control device as in claim 1, the sealing member for sealing between the first cylindrical part is divided into two pieces of sealing structure.

4. A valve timing control device as in Claim 3, a communicating pore is arranged between the sealing member.

5. A valve timing control device comprising:

a rotating member for controlling a valve timing,

a rotation transmitting member which is relatively rotatably fixed to the rotating member,

a fluid pressure chamber formed between the rotating member and the rotation transmitting member,

a vane which is provided in the fluid pressure chamber and dividing the fluid pressure chamber into an advanced angle chamber and a delayed angle chamber, and

a fluid supplying and discharging means for supplying or discharging a fluid to or from the advanced angle chamber and the delayed angle chamber, the fluid supplying and discharging means being relatively rotatable with the rotating member and the rotation transmitting member by supplying the fluid to or discharging the fluid from said advanced angle chamber and the delayed angle chamber,

a first cylindrical part is provided on said rotating member,

a second cylindrical member is provided around the first cylindrical part and the second cylindrical part is overlaid on the other on an inner side in a radial direction,

a sealing groove for accommodating a sealing member for sealing between the first cylindrical part and the second cylindrical member, and

a friction between the side surface of the sealing member and the sealing groove is set to be smaller than a friction between an outer peripheral surface of the sealing member and an inner peripheral surface of the first cylindrical part.

6. A valve timing control device as in claim 5, one of the first cylindrical part or the second cylindrical member is made of aluminum material.

7. A valve timing control device as in claim 5, the sealing member for sealing between the first cylindrical part is divided into two pieces of sealing structure.

8. A valve timing control device as in Claim 7, a communicating pore is arranged between the sealing member.